

AMENDMENTS TO THE SPECIFICATION

Applicants respectfully request the addition of the following paragraphs in the Summary of Invention section, immediately after paragraph [0010] of the published application:

Further disclosed is a method for controlling the transmission of data, via data links which are assigned to different applications, over a transmission medium in a network, in particular a local one, with at least two stations designed for data transmission, where the applications are assigned different priorities together with different parameters to identify a quality of service, characterized in that the establishment by a first station of a new data link, assigned to a first application, is restricted as a function of the available free channel capacity on the transmission medium together with the occupancy of the transmission medium by existing data links, for which the applications have a priority corresponding to that of the first application.

In one embodiment, a) for an existing request for the establishment of a new data link, the first station determines whether a measure of the available free channel capacity corresponds to a measure of the necessary channel capacity given by the parameters of the first application, with at least part of any data traffic which is assigned to applications with lower priority than the priority of the first application being considered, in the context of the determination procedure, to be free channel capacity, and if the result of the determination is positive, the data link is established, and b) if the result of the determination is negative the establishment of the data link is suspended, at least temporarily. The channel capacity may be regarded as free up to the point where a threshold is reached, with this threshold corresponding to a relative fraction of the data traffic which is assigned to applications with a lower priority.

In an alternative embodiment, a) when there is an existing request for the establishment of a new data link by the first station, the data link is established without regard for the current utilization, b) if the transmission medium is occupied by data links assigned to an application with at least a second priority corresponding to that of the first application, at least one of the second stations which are maintaining these links signals in such a way that on the transmission medium a message is communicated with the highest priority to the first station, c) after it has received the message, the first station suspends the new data link, at least temporarily.

In either of the above two embodiments, if the result of establishing the link is negative, a delay time is set after the expiry of which the steps are repeated. After each repetition, the delay time may be increased by a discrete value. The repetitions may then continue until either the establishment of a data link is permitted or the attempt to establish it is finally halted by a termination condition. The duration of the suspension before the steps are repeated can be prescribed as part of the message by the second station as a function of an assessment of the second data link.

Applicants respectfully request the addition of the following paragraphs in the Brief Description of the Drawings section, immediately after paragraph [0012] of the published application:

FIG. 2 is a flow chart illustrating one embodiment of the disclosure;

FIG. 3 is a flow chart illustrating another embodiment of the disclosure;

Applicants respectfully request the addition of the following paragraphs in the Detailed Description section, immediately after paragraph [0023] of the published application:

In one embodiment of the invention, and as set forth in FIG. 2, at step 22 a station receives a request for establishment of a new data link from a first application. At step 24, the station determines whether a measure of an available free channel capacity corresponds to a measure of the necessary channel capacity given by the parameters of the first application. During this process, at least part of any data traffic which is assigned to applications with lower priority than the priority of the first application may be considered to be free channel capacity.

At step 26, responsive to a negative determination (i.e., the available free channel capacity is not sufficient to meet the necessary channel capacity given by the parameters of the first application), the station then suspends establishment of the new data link, at least temporarily.

In another embodiment of the invention, and as set forth in Fig. 3, at step 32 a station receives a request for the establishment of a new data link from a first application. At step 34, the station establishes the new data link at a first priority without regard for a current utilization of the transmission medium. At step 36, the station receives a signal from another station at a priority higher than the first priority requesting suspension of the new data link. At step 38, the station suspends the new data link, at least temporarily.